

REMARKS

Claims 1-19, 22-39, and 41-60 are pending in the present application. Claims 1-19, 22-39 and 41-42 have been amended. Claims 59 and 60 have been added.

Reconsideration of the claims is respectfully requested.

The Examiner has rejected claims 25-28, 30, 31, 34-36 and 41 under 35 U.S.C. §102(b), as being anticipated by O’Riordan (U.S. Patent No. 5,698,090). The Examiner has also rejected claims 1-4, 6-19, 22-24, 42-50 and 52-58 under 35 U.S.C. §103 as being unpatentable over Jonsson (U.S. Patent No. 5,098,372) in view of Abbot (U.S. Patent No. 5,588,816). These rejections are respectfully traversed.

Though slightly different in design and operation, both O’Riordan and Jonsson teach an apparatus that withdraws blood from a patient and processes the blood to produce an overall systemic effect on the patient, e.g. anticoagulation.

In contrast to the references, the present invention provides a means for targeting drug delivery to a specific organ by delivering the therapeutic agent directly into local circulation proximal to the target organ. This has the advantage of allowing the effects of the drug to be largely confined to the target organ while minimizing general systemic effects, particularly when short acting drugs are used. Neither O’Riordan nor Jonsson achieve this localized effect since both of them process blood outside of the body and return it to general circulation to achieve a systemic effect. The present invention has nothing to do with blood processing.

Furthermore, because the therapeutic agent is not combined with the blood until just before introduction into local circulation near the target organ, the present invention can deliver short acting drugs (e.g., adenosine) that would otherwise break down soon after contacting blood, before reaching the desired organ through general circulation. Again, neither O’Riordan nor Jonsson can overcome this problem because they both combine the therapeutic agent (anticoagulant) with the blood outside of the body and then introduce it into general circulation. Short acting agents such as adenosine would break down before leaving the O’Riordan and Jonsson devices, let alone before reaching the target organ through general circulation.

The proposed amendments above help to clarify this distinction by reciting more

specifically the targeted nature of the drug delivery performed by the present invention.

To help facilitate the prosecution of the present application, the Applicants would like the opportunity to schedule an interview with the Examiner to discuss the above amendments and how they clarify the distinction between the present invention and the references.


CONCLUSION

It is respectfully urged that the subject application is patentable over the references cited by Examiner and is now in condition for allowance. Applicants request reconsideration of the application and allowance of the claims.

The Examiner is cordially invited to contact the undersigned attorney at 972.367.2001.

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Respectfully submitted,

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